

## Site Operative Fatality - Horizontal Directional Drilling Pipe Coil Trailer

### Background – What Happened?

In April 2023, an operative working on the HS2 Area North project received fatal injuries when he was struck by the end of a pipe as it was being fed from a coil trailer during a horizontal directional drilling (HDD) works. The stored energy released as the pipe was fed into the drill hole, caused the unsecured end of the pipe to come out of the side of the coil trailer with significant and fatal force.

Although the incident occurred during HDD operations, this Safety Alert has been produced to highlight the incident and raise awareness in the context of the land drilling sector and relevance to BDA members and wider industry.

### What Went Wrong?

The Coroner observed in the Regulation 28 Report sent to the BDA that the equipment was not being used in accordance with the manufacturer's operating manual insofar as the pipe was not secured using a restraining clamp and strap. Furthermore, both the manual, and the risk assessment and method statement for the work identified the hazards, but neither document was comprehensively adhered to.

### Lessons Learned and Further Considerations

The Provision and Use of Work Equipment (PUWER) Regulations 1998 sets out the requirements for employers to ensure the safety of work equipment. This obligation obviously exists for all BDA members and has influenced several key safety improvements in the land drilling sector, not least the introduction of interlocked guards to protect against rotating parts (in accordance with Article 11). In addition, Article 19 of PUWER places obligations on employers to protect workers from sources of stored energy, which is why, for example, whip check restraints must be used on compressed air hoses and retaining clamps are necessary on coiled pipework.

The obligation to document and mitigate risk in accordance with the Hierarchy of Control outlined below should be always be considered when using work equipment of any type:

- Wherever possible, eliminate the hazard.
- Provide safe exclusion zones around any equipment or dangerous moving parts.
- Engineering controls such as fixed or moveable guards, mechanical clamps or other measures should be installed to protect workers from danger.
- Completion of thorough, daily, pre-start equipment checks are essential to prove compliance with RAMS and SSoW.
- Training should be provided for work equipment in line with manufacturers' instructions, and any RAMS and SSoW.
- PPE is the last line of defence within the hierarchy of risk control measures for any work equipment.



Furthermore, both the Management of Health and Safety at Work Regulations 1999 and CDM Regulations 2015, mandate that employers and Principal Contractors must develop Safe Systems of Work and / or RAMS, and these documents MUST be adhered to.

Specific details about the incident and main contractor's investigation can be found here [BBV Safety Alert](#).